

A Philosophical Reassessment of Consciousness-Matter Relations

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In 2005, Richard Conn Henry from Johns Hopkins University published “The Mental Universe” in *Nature*, advancing the idealistic claim that the universe is fundamentally mental and conscious, and that matter has no objective reality. Grounded in a one-sided interpretation of the observational effects in quantum mechanics, this view has sparked long-standing debates across physics, philosophy, neuroscience, and other disciplines. The Unified Complex System Theory (UCST), centered on an ether-mind dualistic ontology, differs from both traditional materialist monism and idealist monism, and offers a more comprehensive account of the mind-matter relationship. Using UCST as a theoretical framework, this paper systematically analyzes multiple fallacies in “The Mental Universe” concerning conceptual definition, logical deduction, and the demarcation of scientific boundaries. It comprehensively reviews both supportive and critical arguments in authoritative journals since 2005, and integrates evidence from interpretive disputes in quantum mechanics, empirical findings in neuroscience, epigenetic mechanisms, and parapsychological phenomena. The study demonstrates that: Quantum measurement essentially involves interactions between material systems, rather than consciousness determining existence; consciousness emerges from the interaction between mind and the physical body, and cannot exist independently of a material substrate; science applies only to the finite, observable world accessible to humans, and cannot pronounce absolute truths about the universe as a whole; monism is unsuitable as a reliable ontological foundation for science, and ether-mind dualistic ontology possesses greater logical completeness and explanatory power.

Keywords: Unified Complex System Theory (UCST), consciousness, matter, quantum mechanics, dualistic ontology, idealism, scientific methodology

Introduction

In 2005, quantum physicist and astronomer Richard Conn Henry published a paper entitled “The Mental Universe” in the leading international journal *Nature*, putting forward a radical view: The universe is not material in essence; only mind and the act of observation possess genuine existence, and humanity should abandon the cognitive habit of treating objects of observation as objective “things” (Henry, 2005). The paper further claimed that quantum mechanics, established in 1925, had already fundamentally resolved the question of the nature of the universe—namely, that the universe is fundamentally mental and spiritual—yet the mainstream physics community has long avoided this “truth” merely because it conflicts with physical intuitions from everyday experience (Henry, 2005). This view equates the observer-induced collapse of the quantum state in quantum

mechanics directly with the idea that consciousness creates reality and determines material existence, triggering sustained and extensive academic debates across fields including the ontology of physics, philosophy of science, cognitive science, neuroscience, and parapsychology.

Since its inception, quantum mechanics has featured a highly precise mathematical framework and ample experimental confirmation, yet profound disagreements persist regarding its ontological interpretation of physical reality (Gibney, 2025). Current mainstream interpretations include the Copenhagen interpretation (Fitzpatrick, 2015), the many-worlds interpretation (Everett, 1957), and Bohmian mechanics (Oriols & Mompart, 2019; Valentini, 2026). The Copenhagen interpretation and Bohmian mechanics are highly consistent or even mathematically equivalent in calculations and experimental predictions, yet diametrically opposed in philosophical stance: The Copenhagen interpretation leans toward epistemological idealism (Henry, 2005; Fitzpatrick, 2015; Gibney, 2025), while Bohmian mechanics exhibits a distinct materialist tendency (Oriols & Mompart, 2019; Valentini, 2026). This key fact clearly illustrates that agreement between a theory and experiment only confirms its instrumental validity, not the ultimate truth of its philosophical interpretation. Scientific research is grounded in repeatability and falsifiability, and its scope is limited to finite systems observable and manipulable by humans; it cannot offer testable judgments on the global properties or ultimate origin of the entire universe (Cui, Li, & Pan, 2025a). Therefore, Henry's direct equation of the Copenhagen interpretation with a "proven ultimate truth of the universe" violates the basic spirit of scientific methodology.

The Unified Complex System Theory (UCST) was proposed by Professor Weicheng Cui of Westlake University and his teams. Grounding itself in an ether-mind dualistic ontology, the theory frames the universe as an infinitely complex system consisting of non-material minds, subtle material particles, observable inanimate entities, and living beings. Consciousness, in turn, arises from the interaction between mind and the physical body throughout the evolution of living systems (Cui et al., 2025a). UCST draws a clear distinction between the **universe** (infinite, belonging to the philosophical domain) and the **world** (finite, belonging to the scientific domain); between **mind** (non-material substrate, philosophical domain) and **consciousness** (the interaction between mind and the physical body, scientific domain); and between **ether** (unobservable substratum particles underlying fundamental particles, a material substrate in the philosophical sense) and **physical objects** (observable particles at or above the fundamental level, belonging to the scientific domain). In doing so, it rigorously delineates the proper boundaries of scientific inquiry. At the same time, it integrates dynamical laws, living systems, and conscious phenomena, and can effectively reveal the logical flaws and philosophical biases in "The Mental Universe".

Taking UCST as its core analytical framework, this paper provides a systematic critique and analysis of the central claims of "The Mental Universe". It also comprehensively surveys supportive and opposing academic viewpoints published in authoritative journals since 2005, supplemented by empirical evidence from quantum mechanics, neuroscience, epigenetics, parapsychology, and other fields. The paper aims to clarify the dialectical relationship between matter and consciousness, correct one-sided interpretations of quantum mechanics and the nature of consciousness, and define the legitimate boundaries and ontological foundations of scientific research. Through rigorous theoretical analysis and academic debate, this work seeks to provide a solid foundation for the correct understanding of the mind-matter relationship in academia, help break the long-standing bottleneck in consciousness research caused by ontological oppositions and inadequate theoretical frameworks (Kuhn, 2024), and offer a more inclusive and explanatorily powerful theoretical path for the future development of frontier fields such as the nature of consciousness, mind-body relations, and the intersection of quantum physics and life sciences.

Core Claims and Logical Fallacies in “The Mental Universe”

Overview of Core Claims

Henry’s central arguments in “The Mental Universe” can be summarized in three points (Henry, 2005):

1. The universe is non-material; its essence is mind and consciousness. Only mind and observation possess real existence.
2. Objects of observation are not objective things in themselves. Humans should abandon the cognitive habit of conceptualizing objects as “things”.
3. Quantum mechanics has long proven the mental nature of the universe. Physicists refuse to accept this only because it contradicts everyday physical intuition.

This view is essentially a modern quantum-physics version of subjective idealism. It inflates the effect of observation on quantum systems into the claim that “consciousness determines being”, completely denying the objective reality of matter. It contains irreconcilable fallacies in logic, scientific methodology, and empirical evidence.

Deconstruction of Logical Fallacies Based on UCST

Confusing “Observation Affects Results” with “Consciousness Determines Existence”. Classic quantum phenomena such as the double-slit experiment and Schrödinger’s cat thought experiment only demonstrate a limited fact: Observation induces wavefunction collapse, changing a quantum state from superposition to a definite state (Fitzpatrick, 2015). However, observation itself necessarily relies on three material carriers: the observer including the brain as the substrate of consciousness (material); the measuring apparatus (material); and the quantum system being observed (material) (Cui et al., 2025a). None can be omitted; there is no “pure observation” independent of matter.

Henry deliberately substitutes “measurement affects quantum states” with “consciousness determines material existence”, a typical idealistic sophism. The Unified Complex System Theory (UCST) clearly states that consciousness cannot exist independently of a material substrate, and that observation is fundamentally an interaction between material systems and non-material minds, rather than the creation of matter by the mind (Cui et al., 2025a). For instance, observation can only be performed by a living human being comprising both a physical body and a mind, whereas a deceased individual with only a physical body lacks this capacity. This confusion deprives his entire theoretical system of a scientific foundation.

Violating the axiom of “Paired Conceptual Existence” and falling into idealistic monism. Scientific concepts depend on the coexistence of opposing categories—a basic axiom of scientific language and logic (Cui et al., 2025a). Matter and mind, objective and subjective, external and internal, presuppose and depend on each other. To deny one is to eliminate the definitional basis of the other. Science arose only after humans distinguished the “self” from the “external world” and must therefore be grounded in a dualistic philosophy (Cui et al., 2025a). This moment of awakening enables one to recognize the coexistence of two distinct entities: the self and the external world. One can neither claim that the self created the external world nor that the external world created the self. Investigating the origins of the self and of the external world represents two separate questions. Both materialists and idealists have attempted to address these questions, yet the UCST clearly establishes that such inquiries lie beyond the scope and capacity of the scientific method (Cui, Li, Pan, & Zeng, 2025b; Cui, 2026).

In Western intellectual history, Descartes and Newton were dualists. After later classical science discarded the concept of God, it failed to develop a reasonable ontological framework, leading to insufficient explanatory power for life and consciousness (Goldstein, Poole, & Safko, 2002)—an important philosophical background for

the emergence of quantum mechanics (Fitzpatrick, 2015; Oriols & Mompert, 2019; Valentini, 2026) and relativity (Einstein, 1916). By claiming that “consciousness is the only real existence” and completely negating the objective status of matter, Henry violates the principle of paired conceptual existence and falls into extreme idealistic monism. This position can explain neither the mind-body relation nor provide a stable ontological foundation for scientific research (Cui et al., 2025a). Most critically, it contradicts the conservation laws of mass and energy, which underpin all of modern physics and chemistry.

UCST proposes that ether (the underlying material existence) and mind (non-material ontology) are coeternal dual substances. Consciousness arises from the interaction between mind and the physical body, not merely from material emergence (Cui et al., 2025a). This framework avoids both the reductionism of materialism and the dogmatism of idealism, achieving ontological completeness.

Failure to address the “Substrate Problem” and “Observation Closure Problem” of consciousness. Henry’s theory contains an unavoidable logical gap: If consciousness is the only real existence, does consciousness itself require a substrate? If consciousness requires a material substrate, this directly contradicts “the universe is non-material”. If consciousness requires no substrate, observation lacks an object, and one cannot explain “to whom do observed phenomena appear”.

From the perspective of Buddhist Vijñānavāda, UCST divides consciousness into eight consciousnesses, clarifying that only the eighth consciousness (ālayavijñāna, mind) is eternally independent. The first six consciousnesses result from the interaction between mind and body, and the seventh acts as a connecting function (Cui et al., 2025a; Evans-Wentz, 1927; Sogyal Rinpoche, 1992). This framework systematically explains nine categories of parapsychological phenomena, including near-death experiences, reincarnation, post-mortem communication, spirit possession, and xenoglossy. Such phenomena cannot be plausibly explained within Henry’s simplistic idealistic framework (Moreira-Almeida & Santos, 2012; Cardeña, 2018; Walach, 2019; Mishlove, 2021; Greyson, 2022).

Misinterpreting the essence of quantum mechanics and misjudging the empirical boundaries of science. The core task of quantum mechanics is to describe the motion and evolution of objects at the microscopic scale, not to deny the existence of matter (Fitzpatrick, 2015). Physical entities such as particles, fields, and waves are essentially different forms of matter, but the wave functions are the derivatives of consciousness. The core function of science is falsification, not “proving absolute truth”. Science can only progressively eliminate errors and approach objective laws through observation and experiment; it cannot claim to grasp ultimate reality (Cui et al., 2025b; Cui, 2026).

Henry treats quantum mechanics as a kind of absolute doctrine, contradicting the original intentions of its founders such as Bohr and Heisenberg (Heisenberg, 1971; Bohr, 1958). Bohr emphasized that quantum mechanics brought a revolution in cognition, not a negation of physical reality (Bohr, 1958). Henry’s one-sided interpretation deviates from the empirical spirit of science from the outset.

Academic Controversy After the Publication of “The Mental Universe”: Support and Opposition

Since the publication of “The Mental Universe” in 2005, academia has split into two sharply opposing camps. Supporters mainly come from quantum consciousness, holistic philosophy, and epigenetics, while opponents are represented by mainstream physics, complex systems science, and experimental neuroscience (Strømme, 2025; Lipton, 2008; Cacioppo & Hawley, 2003; Osinga, 2025).

Supporting Views and Their Theoretical Defects

Extended support from quantum consciousness theories. A 2025 study in *AIP Advances* proposed that consciousness might be a fundamental field of the universe, independent of the nervous system, with the brain acting more like a “receiver” than a “producer”—highly consistent with Henry’s claim that “the universe is mental” (Strømme, 2025, p. 2). The Orchestrated Objective Reduction (Orch OR) model by Penrose and Hameroff suggests that quantum coherence and objective collapse in neuronal microtubules are the origin of consciousness, which supporters cite as key evidence for “consciousness independent of matter” (Penrose & Hameroff, 1996). Later studies in *Neuroscience of Consciousness* attempted to provide experimental support for the Orch OR model (Wiest, 2025).

However, these theories suffer fatal flaws: The brain is a high-temperature, high-noise, high-humidity biological environment that cannot sustain the extreme conditions required for quantum coherence. The Orch OR model lacks replicable empirical support and its plausibility is widely questioned (Osinga, 2025).

One-sided interpretation of epigenetics. Cell biologist Bruce Lipton argued in *The Biology of Belief* that consciousness and belief can create reality (Lipton, 2008), quoting Planck’s statement that “behind matter exists a conscious intelligent mind” (Planck, 1932) to support Henry’s core claims. He claimed that epigenetics proves consciousness can dominate gene expression and thereby determine biological states.

This interpretation involves clear conceptual substitution. The core conclusion of epigenetics is that environmental factors (physical, chemical, biological) influence gene expression. Consciousness, as a subjective state, can only exert indirect effects and in no way equals “consciousness creating genes or matter” (Wang et al., 2020).

Overamplification of subjective experience. Studies by Cacioppo and Hawkley showed that subjective experiences such as loneliness and social isolation significantly affect gene expression and physical health (Cacioppo & Hawkley, 2003). Supporters distort this into “subjective experience determines objective reality” and align it with Henry’s idealism, exaggerating the deterministic role of consciousness over matter.

Opposing Views: Systematic Refutation from Empiricism and Logic

Orthodox quantum mechanics rejects “Consciousness Determines Matter”. Mainstream physics clearly states that quantum measurement is essentially an interaction between material systems. Even without human consciousness, interactions between measuring devices and quantum systems still cause wavefunction collapse (Henry, 2009a; 2009b). Wigner, a Nobel laureate in physics, once proposed the “consciousness-induced collapse” hypothesis, but subsequent research has rejected it. Quantum signals in the brain are only correlated with conscious states, not determinative of quantum states (Benardo & Favour, 2025). A 2025 quantum-information study in *Entropy* further confirmed that quantum effects in the brain cannot support the claim that consciousness exists independently of matter (Gassab, Pusuluk, & Cattaneo, 2025). However, in Bohmian mechanics, the so-called “measurement problem” and “wavefunction collapse” are not required (Oriols & Mompert, 2019; Valentini, 2026).

Systematic critique by the Unified Complex System Theory (UCST).

UCST provides a complete critique of Henry’s views at three levels (Cui et al., 2025a):

1. Ontology: Ether and mind coexist as dual substances, rejecting idealistic monism.
2. Epistemology: Distinguishes the infinite universe (philosophy) from the finite world (science), clarifying the boundaries of science.

3. Methodology: Grounded in 33 axioms and testable experimental designs, rejecting dogmatism without empirical support.

UCST can plausibly explain special cases such as consciousness preserved in individuals with near-absence of brain or severe brain damage, which neither traditional materialism nor Henry's idealism can account for (Merker, 2007; Gennaro, 2018; Shewmon, 1998; McAbee, Chan, & Erde, 2000; Covington et al., 2003; Sellouti, Ayad, Abilkassem, & Agadr, 2023; Toumi, Chafiq, Khayi, & Daoudi, 2024; Buell, 2019).

Neuroscience evidence confirms consciousness depends on a material basis. Numerous neuroscientific studies consistently demonstrate that consciousness strictly depends on the material structure of the brain. fMRI, neuromodulation, and whole-brain mapping show that conscious activities—thinking, perception, emotion—correspond closely to specific brain regions, and damage to these regions abolishes conscious function (Fisher, 2015; Poznanski, Ali, Iannella, & Sbnitnev, 2024; Keppler, 2025; Escolà-Gascón, 2025). A 2025 macaque study in *Cell* identified the claustrum as a key structure for primate consciousness (Lei et al., 2025); a concurrent *Science* study found that higher-order thalamic nuclei directly control the switching of consciousness via thalamofrontal circuits (Fang et al., 2025). These top empirical studies fundamentally refute the idea that “consciousness can exist independently of matter” (Hohwy & Seth, 2020; Luppi, Lyu, & Stamatakis, 2025).

Targeted clarifications of supporting arguments.

1. Authoritative reviews in epigenetics confirm that material environmental factors dominate gene expression; consciousness plays only an indirect role (Wang et al., 2020).

2. The influence of subjective experience on physiology relies on the physical substrate of the body and cannot determine external objective reality (Cole, Hawkley, Arevalo, & Cacioppo, 2011; Holt-Lunstad, Smith, & Baker, 2015; Johnson, 2025).

3. Planck's relevant statements are philosophical conjectures, not tested scientific conclusions (Planck, 1932).

4. The Orch OR model lacks reliable empirical support and cannot serve as evidence for the independent existence of consciousness (Osinga, 2025).

The Dialectical Relationship Between Consciousness and Matter: An Integrated Interpretation Based on UCST

The UCST offers a third path beyond the opposition between materialism and idealism: a view of systemic unity under a dualistic ontology (Cui et al., 2025a).

The ether is the underlying substratum of matter, composed of indirectly observable microparticles, and constitutes the foundation of all visible objects. Without such an entity, the continuity of the three conservation laws—mass, momentum, and energy—cannot be maintained across all physical and chemical processes.

Mind is an independent, non-material ontological entity corresponding to the eighth consciousness in Vijñānavāda philosophy, existing eternally. The introduction of this concept is grounded entirely in the Relativity of Simultaneity Axiom (Cui et al., 2025a); the very concept of matter relies on the co-existence of the concept of the non-material. This is closely analogous to how we must introduce the concept of rest in order to define the concept of motion.

Consciousness must be decomposed into distinct components, some of which are impermanent while others are permanent. The impermanent consciousnesses themselves are a phenomenon that emerges from the interaction between the mind and the physical body; it manifests when mind and body are unified, and dissipates upon their

separation. The existence of the permanent consciousness (mind) provides a coherent framework for explaining the nine anomalous phenomena documented in parapsychological research (Mishlove, 2021).

Science can only investigate the finite, observable, and testable world; it cannot answer questions concerning the origin of mind, ether, or the universe as a whole. These issues belong to the domain of philosophical ontology (Cui et al., 2025a; 2025b; Cui, 2026). UCST acknowledges both the foundational status of matter and the independent existence of mind, yet rejects the claim that consciousness as a whole exists independently of matter. It also emphasizes the active reactive role of consciousness: Subjective experience, belief, and conscious states can influence physiology, behavior, and even the environment, but always on the premise of a physical body. Consciousness cannot stand above matter, let alone become the sole origin of the universe.

This framework can accommodate evidence from quantum mechanics, classical physics, neuroscience, biology, parapsychology, and other fields, achieving logical consistency and explanatory completeness.

Conclusion

Henry's claim in "The Mental Universe" that "the universe is essentially consciousness and matter is not real" (Henry, 2005) is essentially a one-sided interpretation of quantum mechanics and a modern reconstruction of idealistic philosophy. Its core fallacies include: confusing observational influence with consciousness determining existence; violating the axiom of paired conceptual existence; failing to resolve the substrate problem of consciousness; and misinterpreting the nature of science and the meaning of quantum mechanics. These fallacies render his theory logically inconsistent and empirically unsupported.

With its ether-mind dualistic ontology, the UCST provides a more robust and explanatorily powerful framework for understanding the relationship between consciousness and matter: Consciousness must be decomposed into distinct components, some of which are impermanent while others are permanent. The impermanent consciousnesses emerges from the interaction between mind and body and cannot exist independently of matter; the existence of the permanent consciousness (mind) provides a coherent framework for explaining the nine anomalous phenomena documented in parapsychological research (Mishlove, 2021). Science applies only to the finite observable world and cannot claim to grasp the ultimate truth of the universe; monism—whether materialist or idealist—is unsuitable as an ontological foundation for science (Cui et al., 2025a; 2025b; Cui, 2026).

The academic value of "The Mental Universe" lies in stimulating deep reflection on consciousness, matter, quantum mechanics, and the boundaries of science, and promoting the development of interdisciplinary fields such as quantum consciousness, complex systems, and parapsychology. However, its idealistic stance contradicts the spirit of science and cannot serve as a reliable approach to understanding the nature of the universe. Future research should, under integrative frameworks such as UCST, uphold empirical principles and systemic thinking to further explore major issues including the nature of consciousness, the mind-body relationship, and cosmic complexity.

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Data Availability Statement

The original contributions presented in this study are included in the article. Further inquiries can be directed to the corresponding author CUI Weicheng.

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